## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

KONINKLIJKE PHILIPS N.V.,	)
Plaintiff,	)
v.	) C.A. No. 20-1713 (CFC)
THALES DIS AIS USA, LLC;	) JURY TRIAL DEMANDED
THALES DIS AIS DEUTSCHLAND GMBH, THALES USA, INC.,	) REDACTED -
THALES S.A., CALAMP CORP.,	) PUBLIC VERSION
XIRGO TECHNOLOGIES, LLC, and LAIRD	)
CONNECTIVITY, INC.	
Defendants.	)

## ANSWER BY THALES DIS AIS USA, LLC AND THALES DIS AIS DEUTSCHLAND GMBH<sup>1</sup>

Defendants Thales DIS AIS USA, LLC and Thales DIS AIS Deutschland GmbH (collectively "Thales") state the following as their Answer to the Complaint filed by Plaintiff Koninklijke Philips N.V. ("Plaintiff" or "Philips") in the above-entitled action. The responses below reflect the current state of Thales' knowledge and belief regarding the subject matter of the allegations. Thales reserves the right to supplement, modify, and/or amend its responses based on any additional facts or subsequent developments that become available or known to Thales after the filing of this Answer. Any factual allegation admitted below is admitted only as to the

<sup>&</sup>lt;sup>1</sup> Defendants Thales USA, Inc. and Thales S.A. will respond or otherwise move in response to the Complaint on April 5, 2021 pursuant to D.I. 7.

specifically admitted facts and not as to any implications, conclusions, characterizations, or speculations that may be associated with or potentially inferred from any admitted facts. Except as specifically admitted in response to each paragraph below, which corresponds to the numbered paragraphs in the Complaint, Thales denies each and every allegation, including any implications, suggestions, or characterizations in the headings in the Complaint.

- 1. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 1, including the footnote. Except as expressly admitted, Thales denies each and every allegation of paragraph 1, including the footnote.
- 2. Thales admits that Thales DIS AIS USA, LLC was previously known as Gemalto IOT LLC, formerly named Cinterion Wireless Modules NAFTA LLC. Thales admits that Thales DIS AIS USA, LLC is a Delaware limited liability company, that the address of Thales DIS AIS USA, Inc. is 310 120th Avenue NE, Unit A/100, Bellevue, Washington 98005, and that Corporation Service Company, located at 251 Little Falls Drive, Wilmington, DE 19808, is the agent for service of process for Thales DIS AIS USA, LLC. Except as expressly admitted, Thales denies each and every allegation of paragraph 2.

- 3. Thales admits that Thales DIS AIS Deutschland GmbH is a German limited liability company previously known as Gemalto M2M GmbH or Cinterion Wireless Modules GmbH and that the address of Thales DIS AIS Deutschland GmbH is Werinherstraße. 81, München, Bayern, 81541, Germany. Except as expressly admitted, Thales denies each and every allegation of paragraph 3.
- 4. Thales admits that Thales USA, Inc. is a Delaware corporation and that the address of Thales USA, Inc. is 2733 Crystal Dr Ste 120, Arlington, VA, 22202. Thales admits that Corporation Service Company, located at 251 Little Falls Drive, Wilmington, DE 19808, is the agent for service of process for Thales USA, Inc. Except as expressly admitted, Thales denies each and every allegation of paragraph 4.
- 5. Defendant Thales S.A. ("Thales S.A.") is a French company located at Tour Carpe Diem Esplanade Nord, Place Des Corolles, Courbevoie, Ile-De-France, 92400, France. Except as expressly admitted, Thales denies each and every allegation of paragraph 5.
- 6. Thales admits that Plaintiff is referring to the Thales Defendants collectively as Thales. Except as expressly admitted, Thales denies each and every allegation of paragraph 6.

- 7. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 7. Except as expressly admitted, Thales denies each and every allegation of paragraph 7.
- 8. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 8. Except as expressly admitted, Thales denies each and every allegation of paragraph 8.
- 9. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 9. Except as expressly admitted, Thales denies each and every allegation of paragraph 9.
  - 10. Thales denies each and every allegation of paragraph 10.
  - 11. Thales denies each and every allegation of paragraph 11.
- 12. To the extent the allegations against CalAmp are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint, Thales denies each and every allegation of paragraph 12. Thales lacks knowledge or information to form a belief as to the truth of any remaining allegations in this paragraph relating to CalAmp. Except as expressly admitted, Thales denies each and every allegation of paragraph 12.
- 13. To the extent the allegations against CalAmp are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint,

Thales denies each and every allegation of paragraph 13. Thales lacks knowledge or information to form a belief as to the truth of any remaining allegations in this paragraph relating to CalAmp. Except as expressly admitted, Thales denies each and every allegation of paragraph 13.

- 14. To the extent the allegations against Xirgo are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint, Thales denies each and every allegation of paragraph 14. Thales lacks knowledge or information to form a belief as to the truth of any remaining allegations in this paragraph relating to Xirgo. Except as expressly admitted, Thales denies each and every allegation of paragraph 14.
- 15. To the extent the allegations against Xirgo are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint, Thales denies each and every allegation of paragraph 15. Thales lacks knowledge or information to form a belief as to the truth of any remaining allegations in this paragraph relating to Xirgo. Except as expressly admitted, Thales denies each and every allegation of paragraph 15.
- 16. To the extent the allegations against Laird are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint, Thales denies each and every allegation of paragraph 16. Thales lacks knowledge

or information to form a belief as to the truth of any remaining allegations in this paragraph relating to Laird. Except as expressly admitted, Thales denies each and every allegation of paragraph 16.

- 17. To the extent the allegations against Laird are based solely on the inclusion of Thales modules specifically identified in paragraph 50 of the Complaint, Thales denies each and every allegation of paragraph 17. Thales lacks knowledge or information to form a belief as to the truth of any remaining allegations in this paragraph relating to Laird. Except as expressly admitted, Thales denies each and every allegation of paragraph 17.
- 18. Thales admits that Plaintiff, together with another entity not a party to this action, filed a complaint with the International Trade Commission ("ITC") captioned, *Certain UMTS and LTE Cellular Communication Modules and Products Containing the Same*, No. 337-TA-1240. Thales denies that Plaintiff is entitled to any of the remedies sought from the ITC or any injunctive relief from this Court. Except as expressly admitted, Thales denies each and every allegation of paragraph 18.
- 19. Thales admits that the ITC complaint names Thales DIS AIS USA, Inc., Thales DIS AIS Deutschland GmbH, Thales USA, Inc., Thales S.A., Telit Wireless Solutions, Inc., Telit Communications PLC, Quectel Wireless Solutions Co., Ltd.,

CalAmp Corp., Xirgo Technologies, LLC, and Laird Connectivity, Inc. as respondents and asserts the same patents asserted in this case. Except as expressly admitted, Thales denies each and every allegation of paragraph 19.

- 20. Thales admits that 28 U.S.C. § 1659 provides that a party to the civil action that is also a respondent in the proceeding before the Commission may request a stay of the civil action within 30 days after a party is named as a respondent in the proceeding before the Commission, and "the district court shall stay, until the determination of the Commission becomes final, proceedings in the civil action with respect to any claim that involves the same issues involved in the proceeding before the Commission." Except as expressly admitted, Thales denies each and every allegation of paragraph 20.
- 21. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 21. Except as expressly admitted, Thales denies each and every allegation of paragraph 21.
- 22. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 22. Except as expressly admitted, Thales denies each and every allegation of paragraph 22.

- 23. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 23. Except as expressly admitted, Thales denies each and every allegation of paragraph 23.
- 24. Thales admits that Plaintiff is a member of the European Telecommunications Standards Institute ("ETSI"). Thales lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 24. Except as expressly admitted, Thales denies each and every allegation of paragraph 24.
- 25. Thales admits that Philips has been involved with UMTS and LTE standards. Thales lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 25. Except as expressly admitted, Thales denies each and every allegation of paragraph 25.
- 26. Thales admits that Plaintiff owns a portfolio of patents relating to 2G (Global System for Mobile ("GSM")), 3G (UMTS), and 4G (LTE). Thales lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 26. Except as expressly admitted, Thales denies each and every allegation of paragraph 26.

- 27. Thales admits that Philips is required to license its worldwide patent portfolio on FRAND terms pursuant to ETSI licensing practices. Except as expressly admitted, Thales denies each and every allegation of paragraph 27.
- 28. Thales denies that Plaintiff has proceeded in good faith to offer the Philips worldwide cellular communications portfolio for licensing to Thales in accordance with ETSI licensing practices. Thales lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 28. Except as expressly admitted, Thales denies each and every allegation of paragraph 28.
- 29. Thales admits that it has rejected Plaintiff's non-FRAND offers to license the Philips worldwide cellular communications portfolio. Thales admits that an incomplete quote from *Unwired Planet Int'l Ltd v. Conversant Wireless Licensing SARL*, [2020] UKSC 37 (Aug. 26, 2020), is included in this paragraph. Except as expressly admitted, Thales denies each and every allegation of paragraph 29.
- 30. Thales lacks knowledge or information sufficient to form a belief as to the allegations of this paragraph relating to unidentified devices. Thales admits that the asserted patents are among the worldwide portfolio of patents which Plaintiff has declared essential to 3G UMTS and/or 4G LTE cellular standards established by ETSI and 3GPP. Thales lacks knowledge or information sufficient to form a belief

as to the allegations of this paragraph relating to unidentified "cellular communications modules and related internet of things (IoT) devices." Except as expressly admitted, Thales denies each and every allegation of paragraph 30.

- Thales admits that the patent laws of the United States, Title 35 of the United States Code, apply to this action which confers subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a). Except as expressly admitted, Thales denies each and every allegation of paragraph 31.
- 32. Thales admits that Thales DIS AIS USA, LLC is a Delaware limited liability company, that Thales USA, Inc. is a Delaware corporation, and that they have complied with and are entitled to the rights and benefits of Delaware law. Thales denies that there is personal jurisdiction over Thales DIS AIS Deutschland GmbH and Thales S.A. Pursuant to the stipulation of the parties, Thales is not contesting personal jurisdiction over Thales DIS AIS Deutschland GmbH in this action. Except as expressly admitted, Thales denies each and every allegation of paragraph 32.
- 33. Thales denies that there is personal jurisdiction over Thales DIS AIS Deutschland GmbH and Thales S.A. Pursuant to the stipulation of the parties, Thales is not contesting personal jurisdiction over Thales DIS AIS Deutschland GmbH in

this action. Except as expressly admitted, Thales denies each and every allegation of paragraph 33.

- 34. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 34. Except as expressly admitted, Thales denies each and every allegation of paragraph 34.
- 35. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 35. Except as expressly admitted, Thales denies each and every allegation of paragraph 35.
- 36. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 36. Except as expressly admitted, Thales denies each and every allegation of paragraph 36.
- 37. Thales admits that it is not contesting venue in this district for purposes of this action only pursuant to the stipulation of the parties. Except as expressly admitted, Thales denies each and every allegation of paragraph 37.
- 38. Thales admits that it is not contesting venue in this district for purposes of this action only pursuant to the stipulation of the parties. Except as expressly admitted, Thales denies each and every allegation of paragraph 38.

- 39. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 39. Except as expressly admitted, Thales denies each and every allegation of paragraph 39.
- 40. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 40. Except as expressly admitted, Thales denies each and every allegation of paragraph 40.
- 41. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 41. Except as expressly admitted, Thales denies each and every allegation of paragraph 41.
- 42. Thales admits that Plaintiff has asserted claims 1-4, 9-12, and 17 of U.S. Patent No. 7,944,935 ("'935 patent"), claims 12 and 15 of U.S. Patent No. 7,554,943 ("'943 patent"), claims 9 and 12 of U.S. Patent No. 8,199,711 ("'711 patent"), and claims 1-8 of U.S. Patent No. 8,831,271 ("'271 patent"). Except as expressly admitted, Thales denies each and every allegation of paragraph 42.
- 43. Thales admits that Plaintiff has offered to license the Philips worldwide portfolio of patents declared standards-essential ("Philips SEP portfolio") and that Thales has rejected those offers as non-FRAND in violation of ETSI licensing requirements. Except as expressly admitted, Thales denies each and every allegation of paragraph 43.

- 44. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that this letter was sufficient to provide notice and denies that Thales had actual knowledge of the specific patents asserted in this action prior to the filing of the complaint. Except as expressly admitted, Thales denies each and every allegation of paragraph 44.
  - 45. Thales denies each and every allegation of paragraph 45.
- 46. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 46. Except as expressly denied, Thales denies each and every allegation of paragraph 46.
- 47. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 47. Except as expressly denied, Thales denies each and every allegation of paragraph 47.
- 48. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 48. Except as expressly denied, Thales denies each and every allegation of paragraph 48.
  - 49. Thales denies each and every allegation of paragraph 49.

- Thales admits that EHS6, ELS61-US, PLS62-W, ELS31-V, CL31, 50. ELS31, ELS61, ELS81, EMS31, ENS22, EXS62-W, EXS82-W, mPLAS9, mPLS62,mPLS8, PLAS9, PLPS9, PLS62, PLS8, and TX62PLS8-US are Thales cellular communication module models. Thales denies that all of these modules are forth https://www.thalesgroup.com/en/markets/digital-identity-andset at security/iot/iot-connectivity/products/iot-products/els61-usa. Thales denies that EH5-US is a Thales cellular communication module model. Thales is informed and believes that Xirgo, Laird, and CalAmp have purchased Thales cellular communications modules. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph relating to unidentified products, "and the like," or any of the allegations relating to Xirgo, Laird, and CalAmp. Except as expressly admitted, Thales denies each and every allegation of paragraph 50.
- 51. Thales denies that photos of ELS61-US are shown in paragraph 51. Thales lacks knowledge or information as to the remaining allegations of paragraph 51. Except as expressly admitted, Thales denies each and every allegation of paragraph 51.
- 52. Thales admits that what appears to be photos of Cinterion PLS62-W are shown in paragraph 52. Thales lacks knowledge or information as to the remaining

allegations of paragraph 52. Except as expressly admitted, Thales denies each and every allegation of paragraph 52.

- 53. Thales admits that what appears to be photos of Cinterion ELS31-V are shown in paragraph 53. Thales lacks knowledge or information as to the remaining allegations of paragraph 53. Except as expressly admitted, Thales denies each and every allegation of paragraph 53.
- 54. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 54. Except as expressly admitted, Thales denies each and every allegation of paragraph 54.
- 55. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 55. Except as expressly admitted, Thales denies each and every allegation of paragraph 55.
- 56. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 56. Except as expressly admitted, Thales denies each and every allegation of paragraph 56.
- 57. Thales admits that ELS61-US, PLS62-W, and ELS31-V have been certified by AT&T and Verizon for use on U.S. cellular networks including LTE and HSPA+ wireless networks. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph relating to

unidentified modules, "and the like," unidentified carriers, and "others." Thales denies referenced these modules that any of in are https://opendevelopment.verizonwireless.com/design-and-build-approved-modules in https://iotdevices.att.com/modules.aspx. Thales admits that or https://www.thalesgroup.com/en/markets/digital-identity-and-security/iot/iotconnectivity/products/iot-products/els61-usa references AT&T. Except as expressly admitted, Thales denies each and every allegation of paragraph 57.

- N.V. as assignee, that the '935 patent lists Koniklijke Philips Electronics N.V. as assignee, that the '935 patent bears the title "Method for Priority Based Queuing and Assembling of Packets," that a copy of the '935 patent appears to be attached as Exhibit A to the complaint, and that the '935 patent issued from a PCT application filed November 4, 2005. Except as expressly admitted, Thales denies each and every allegation of paragraph 58.
- 59. Thales admits that the quoted language appears at column 1, lines 1-14 in the specification of the '935 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 59.
- 60. Thales admits that the quoted language appears at column 1, lines 27-47 in the specification of the '935 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 60.

- of the sentence that appears at column 1, lines 48-49 in the specification of the '935 patent. Thales admits that the cited portions of the '935 patent specification describe assigning different priorities to data packets based on rules to select data packets with higher or lower priority to enable efficient use of transmission capacity. Thales denies that such a method is new or novel. Except as expressly admitted, Thales denies each and every allegation of paragraph 61.
- 62. Thales denies that any of the claims of the '935 patent, including claims 1-4, 9-12, and 17, are directed to anything more than an abstract idea or any patentable improvement in radio communications. Thales denies that providing rules to manage data transmissions based on priority and capacity or an apparatus for multiplexing data packets, input buffer, storage medium, switch, or output buffer were not already well-known, routine, and conventional at the time of the alleged invention. Except as expressly admitted, Thales denies each and every allegation of paragraph 62.
- 63. Thales denies that any of the claims of the '935 patent, including claims 1-4, 9-12, and 17, are directed to any patentable improvement over pre-existing technologies in radio communications. Except as expressly admitted, Thales denies each and every allegation of paragraph 63.

- 64. Thales denies that the claims of the '935 patent are directed to any patentable improvements beyond implementation of pre-existing practices. Except as expressly admitted, Thales denies each and every allegation of paragraph 64.
- 65. Thales denies that the claims of the '935 patent contain any inventive concept to be patent-eligible. Except as expressly admitted, Thales denies each and every allegation of paragraph 65.
- 66. Thales admits that 35 U.S.C. § 282(a) provides that each claim of a patent, whether independent or dependent, are presumed valid independent of the validity of other claims. Thales denies that the presumption of validity applies to the issue of subject matter eligibility under 35 U.S.C. § 101. Except as expressly admitted, Thales denies each and every allegation of paragraph 66.
- N.V. as assignee, that the '943 patent bears the title "Radio Communication System," that a copy of the '943 patent appears to be attached as Exhibit B to the complaint, that the '943 patent issued from a PCT application filed January 27, 2003, and that the '943 patent purports to claim priority to one of the GB applications filed February 8, 2002 and February 12, 2002. Except as expressly admitted, Thales denies each and every allegation of paragraph 67.

- 68. Thales admits that the quoted language appears in column 1, lines 16-40 of the '943 patent specification. Except as expressly admitted, Thales denies each and every allegation of paragraph 68.
- 69. Thales admits that the quoted language appears in column 1, lines 42-60 of the '943 patent specification. Except as expressly admitted, Thales denies each and every allegation of paragraph 69.
- 70. Thales admits that the language quoted in the first sentence of paragraph 70 appears in column 1, lines 65-67 of the '943 patent specification. Thales admits that the cited portions of the '943 patent specification describes changing the allocated control channel according to a defined sequence known to both the primary station and the secondary station. Thales denies that the '943 patent discloses any patentable improvement over previously existing technology. Except as expressly admitted, Thales denies each and every allegation of paragraph 70.
- 71. Thales denies that any of the claims of the '943 patent, including claims 12 and 15, are directed to anything more than an abstract idea or any patentable improvement in radio communications. Thales denies that managing data transmissions in a radio communication system with data channels and control channels between a primary station and secondary station were not already well-

known, routine, and conventional at the time of the alleged invention. Except as expressly admitted, Thales denies each and every allegation of paragraph 71.

- Thales denies that any of the claims of the '943 patent, including claims 12 and 15, are directed to any patentable improvement over pre-existing technologies in radio communications. Except as expressly admitted, Thales denies each and every allegation of paragraph 72.
- 73. Thales denies that the claims of the '943 patent are directed to any patentable improvements beyond implementation of pre-existing practices. Except as expressly admitted, Thales denies each and every allegation of paragraph 73.
- 74. Thales denies that the claims of the '943 patent contain any inventive concept to be patent-eligible. Except as expressly admitted, Thales denies each and every allegation of paragraph 74.
- 75. Thales admits that 35 U.S.C. § 282(a) provides that each claim of a patent, whether independent or dependent, are presumed valid independent of the validity of other claims. Thales denies that the presumption of validity applies to the issue of subject matter eligibility under 35 U.S.C. § 101. Except as expressly admitted, Thales denies each and every allegation of paragraph 75.
- 76. Thales admits that the '711 patent lists Koninklijke Philips Electronics N.V. as assignee, that the '711 patent bears the title "Radio Communication

System," that a copy of the '711 patent appears to be attached as Exhibit C to the complaint, and that the '711 patent issued from a continuation of the application filed August 3, 2004 which led to the issuance of the '943 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 76.

- 77. Thales admits that the '711 patent shares a common specification with the '943 patent and that the same portions of the specification quoted in paragraphs 68 and 69 are cited in paragraphs 78 and 79. Except as expressly admitted, Thales denies each and every allegation of paragraph 77.
- 78. Thales admits that the quoted language appears at column 1, lines 25-49 in the corresponding portion of the specification of the '711 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 78.
- 79. Thales admits that the quoted language appears at column 1, lines 51 to column 2, line 3 in the corresponding portion of the specification of the '711 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 79.
- 80. Thales admits that the same language from the '943 patent specification quoted in the first sentence of paragraph 80 appears in column 2, lines 7-9 of the '711 patent specification. Thales admits that the cited portions of the '711 patent specification contains the same description as the '943 patent of changing the

allocated control channel according to a defined sequence known to both the primary station and the secondary station. Thales denies that the '711 patent discloses any patentable improvement over previously existing technology. Except as expressly admitted, Thales denies each and every allegation of paragraph 80.

- 81. Thales denies that any of the claims of the '711 patent, including claims 9 and 12, are directed to anything more than an abstract idea or any patentable improvement in radio communications. Thales denies that managing data transmissions in a radio communication system or physical devices such as a primary station and secondary station were not already well-known, routine, and conventional at the time of the alleged invention. Except as expressly admitted, Thales denies each and every allegation of paragraph 81.
- 82. Thales denies that the claims of the '711 patent, including claims 9 and 12, are directed to any patentable improvements implementation of pre-existing practices or pre-existing technologies. Except as expressly admitted, Thales denies each and every allegation of paragraph 82.
- 83. Thales denies that the claims of the '711 patent are directed to any patentable improvements beyond implementation of pre-existing practices or pre-existing technologies. Except as expressly admitted, Thales denies each and every allegation of paragraph 83.

- 84. Thales denies that the claims of the '711 patent contain any inventive concept to be patent-eligible. Except as expressly admitted, Thales denies each and every allegation of paragraph 84.
- 85. Thales admits that 35 U.S.C. § 282(a) provides that each claim of a patent, whether independent or dependent, are presumed valid independent of the validity of other claims. Thales denies that the presumption of validity applies to the issue of subject matter eligibility under 35 U.S.C. § 101. Except as expressly admitted, Thales denies each and every allegation of paragraph 85.
- N.V. as assignee, that the '271 patent bears the title "Communication System and Method of Operating the Communication System," that a copy of the '271 patent appears to be attached as Exhibit D to the complaint, and that the '271 patent issued from a PCT application filed August 4, 2004, and purports to claim priority to one of the GB applications filed August 11, 2003 and May 14, 2004. Except as expressly admitted, Thales denies each and every allegation of paragraph 86.
- 87. Thales admits that the quoted language appears at column 1, lines 11-24 in the specification of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 87.

- 88. Thales admits that the quoted language appears at column 1, lines 25-39 of the specification of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 88.
- 89. Thales admits that the language quoted in the first sentence of paragraph 89 appears in column 1, lines 40-42 of the '271 patent specification. Thales admits that the cited portions of the '271 patent specification describes allocating power levels to accommodate different transmission requirements. Thales denies that the '943 patent discloses any patentable improvement over previously existing technology. Except as expressly admitted, Thales denies each and every allegation of paragraph 89.
- 90. Thales denies that any of the claims of the '271 patent, including claims 1-8, are directed to anything more than an abstract idea or any patentable improvement in radio communications. Thales denies that managing data transmissions in a radio communication system or physical devices such as a base station, a mobile stations, with controllers, antennas and transceivers were not already well-known, routine, and conventional at the time of the alleged invention. Except as expressly admitted, Thales denies each and every allegation of paragraph 90.

- 91. Thales denies that the claims of the '271 patent, including claims 1-8, are directed to any patentable improvements implementation of pre-existing practices or pre-existing technologies. Except as expressly admitted, Thales denies each and every allegation of paragraph 91.
- 92. Thales denies that the claims of the '271 patent are directed to any patentable improvements beyond implementation of pre-existing practices or pre-existing technologies. Except as expressly admitted, Thales denies each and every allegation of paragraph 92.
- 93. Thales denies that the claims of the '271 patent contain any inventive concept to be patent-eligible. Except as expressly admitted, Thales denies each and every allegation of paragraph 93.
- 94. Thales admits that 35 U.S.C. § 282(a) provides that each claim of a patent, whether independent or dependent, are presumed valid independent of the validity of other claims. Thales denies that the presumption of validity applies to the issue of subject matter eligibility under 35 U.S.C. § 101. Except as expressly admitted, Thales denies each and every allegation of paragraph 94.
- 95. Thales incorporates by reference its responses to paragraph 1-94 above as though fully repeated in response to paragraph 95.
  - 96. Thales denies each and every allegation of paragraph 96.

- 97. Thales is informed and believes that CalAmp, Xirgo, and Laird have purchased Thales cellular communication modules. Thales lacks knowledge or information sufficient to form a belief as to the truth of remaining allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to the doctrine of equivalents, contributory infringement, or inducement of infringement of any of the claims of the '935 patent. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph relating to unidentified cellular communication modules or unidentified IoT products. Except as expressly admitted, Thales denies each and every allegation of paragraph 97.
- 98. Thales lacks knowledge or information sufficient to form a belief as to the factual basis of the allegations of inducement in this paragraph. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that this letter was sufficient to provide notice and denies that Thales had actual knowledge of the '935 patent prior to the filing of the complaint. Thales lacks knowledge or information sufficient to form a belief as to

the truth of allegations in this paragraph relating to CalAmp, Xirgo, or Laird. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others," "end users," and "devices." Except as expressly admitted, Thales denies each and every allegation of paragraph 98.

- 99. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to contributory infringement of any of the claims of the '935 patent. Thales lacks knowledge or information sufficient to form a belief as to the truth of allegations in this paragraph relating to CalAmp, Xirgo, or Laird. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that this letter was sufficient to provide notice and denies that Thales had actual knowledge of the '935 patent prior to the filing of the complaint. Except as expressly admitted, Thales denies each and every allegation of paragraph 99.
  - 100. Thales denies each and every allegation of paragraph 100.
- 101. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in

paragraph 50 of the complaint to perform the alleged method. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringe claim 1 of the '935 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 101.

- 102. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 102.
- 103. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 103.
- 104. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales

cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 104.

- 105. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 105.
- 106. Thales admits that dependent claim 2 of the '935 patent recites "according to the first rule data packets are selected from the queue containing the highest priority of the data packets." Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 106.
- 107. Thales admits that dependent claim 3 of the '935 patent recites "according to the second rule data packets are selected from one or more of the

queues containing data packets having a lower priority than the highest priority." Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 107.

- 108. Thales admits that dependent claim 4 of the '935 patent recites "according to the second rule data packets are selected from any queue, except at least the highest priority queue, for which the data packets have experienced a delay longer than a threshold delay." Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 108.
- 109. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint is a multiplexing apparatus as described

in the preamble of claim 9 of the '935 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 109.

- as to what is alleged to be "a means for receiving data packets." Except as expressly admitted, Thales denies each and every allegation of paragraph 110.
- as to what is alleged to be "a means for operating a queue store for queue store for each different priority of data packet." Except as expressly admitted, Thales denies each and every allegation of paragraph 111.
- as to what is alleged to be "a means for assembling," what is alleged to be "a first portion of the group," what is alleged to be "a second portion of the group," operating a queue store for queue store for each different priority of data packet," and what is alleged to be "the queue stores." Except as expressly admitted, Thales denies each and every allegation of paragraph 112.
- 113. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be "a means for transmitting the group." Except as expressly admitted, Thales denies each and every allegation of paragraph 113.

- 114. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 114.
- which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 115.
- which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 116.
- what part of the each of the Thales cellular communications modules identified in paragraph 50 of the complaint is alleged to be "a communication termination" and what part is alleged to be "the multiplexing apparatus." Except as expressly admitted, Thales denies each and every allegation of paragraph 117.

- 118. Thales admits that its cellular communication modules comply with LTE standards set forth in 3GPP TS 36.321 and 3GPP TS 36.331. Except as expressly admitted, Thales denies each and every allegation of paragraph 118.
- registered at the FCC for use in the U.S. cellular communication network. Thales admits that ELS6-US is LTE (FDD) 3GPP Rel.9 compliant, that PLS62-W is 3GPP Rel.9 compliant, and ELS31-V is LTE (FDD) 3GPP Rel.9+. Thales admits that data sheets for ELS61, PLS62, and ELS31 are available at the cited links. Thales admits that the quoted excerpt appears in 3GPP TS 36.321 § 5.4.3. Except as expressly admitted, Thales denies each and every allegation of paragraph 119.
- 120. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 120.
- 121. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 121.
- Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 122.

- 123. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.5. Except as expressly admitted, Thales denies each and every allegation of paragraph 123.
- 124. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 124.
- 125. Thales admits that the quoted excerpt appears in 3GPP TS 36.331 § 6.3.2. Except as expressly admitted, Thales denies each and every allegation of paragraph 125.
- 126. Thales admits that 3GPP TS 36.321 § 5.4.3.1 shows Step 3, Bj≤zero. Except as expressly admitted, Thales denies each and every allegation of paragraph 126.
- 127. Thales admits that 3GPP TS 36.321 § 5.4.3.1 shows Step 1, Bj>zero. Except as expressly admitted, Thales denies each and every allegation of paragraph 127.
- 128. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 128.

- 129. Thales admits that the quoted language appears in 3GPP TS 36.321 § 5.4.3.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 129.
- 130. Thales incorporates by reference its responses to paragraphs 1-129 above as though fully repeated in response to paragraph 130.
  - 131. Thales denies each and every allegation of paragraph 131.
- the allegations in this paragraph relating to the doctrine of equivalents, contributory infringement, or inducement of infringement of any of the claims of the '943 patent. Thales is informed and believes that CalAmp, Xirgo, and Laird have purchased Thales cellular communication modules. Thales lacks knowledge or information sufficient to form a belief as to the truth of remaining allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales lacks knowledge of information sufficient to form a belief as to the truth of allegations of this paragraph relating to unidentified cellular communication modules or "the like." Except as expressly admitted, Thales denies each and every allegation of paragraph 132.
- 133. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to inducement of infringement of any of the claims of the '943 patent. Thales lacks knowledge or information sufficient to form

a belief as to the truth of the allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that it had actual knowledge of the '943 patent prior to the filing of the complaint. Thales lacks knowledge of information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others," "end users," and "devices." Except as expressly admitted, Thales denies each and every allegation of paragraph 133.

the factual basis for any of the allegations in this paragraph relating to contributory infringement of any of the claims of the '943 patent. Thales lacks knowledge or information to form a belief as to the truth of the allegations in this paragraph relating to CalAmp, Xirgo, and Laird. Thales lacks knowledge of information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others." Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that it had actual

knowledge of the '943 patent prior to the filing of the complaint. Except as expressly admitted, Thales denies each and every allegation of paragraph 134.

- 135. Thales denies each and every allegation of paragraph 135.
- 136. Thales admits that the Thales modules identified in paragraph 50 of the complaint is capable of being used in a radio communication system. Except as expressly admitted, Thales denies each and every allegation of paragraph 136.
- 137. Thales lacks knowledge or information sufficient to form a belief as to what part of each Thales module identified in paragraph 50 of the complaint is alleged to be the primary station, what part is alleged to be the secondary station, and where in each Thales module a data channel and a plurality of control channels are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 137.
- as to what is alleged to be the "means for determining ...," what part of each Thales module identified in paragraph 50 of the complaint is alleged to be the primary station, what part is alleged to be the secondary station, and where in each Thales module the allocated control channel is alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 138.

- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint the "control channels" are alleged to be or how the alleged method of configuring the defined sequence is performed. Except as expressly admitted, Thales denies each and every allegation of paragraph 139.
- which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringe claim 15 of the '943 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 140.
- what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the primary station," "the secondary station," and "control channels" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 141.

- what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the primary station," "the secondary station," and "the allocated control channel" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 142.
- 143. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the secondary station" and "currently allocated control channel" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 143.
- 144. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint

"control channels" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 144.

- 145. Thales admits that its cellular communication modules comply with LTE standards set forth in 3GPP TS 36.201, 3GPP TS 36.211, 3GPP TS 36.212, 3GPP TS 36.213, 3GPP TS 36.300, 3GPP TS 36.306, 3GPP TS 36.321, and 3GPP TS 36.331. Except as expressly admitted, Thales denies each and every allegation of paragraph 145.
- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "secondary station," "primary station," "data channel," and "control channels" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits that ELS6-US is LTE (FDD) 3GPP Rel.9 compliant, that PLS62-W is 3GPP Rel.9 compliant, and ELS31-V is LTE (FDD) 3GPP Rel.9+. Thales admits that data sheets for ELS61, PLS62, and ELS31 are available at the cited links. Except as expressly admitted, Thales denies each and every allegation of paragraph 146.

- 147. Thales admits that the quoted excerpt appears in 3GPP TS 36.306 § 4.1A. Thales admits that 3GPP Technical Specifications are published by 3GPP. Except as expressly admitted, Thales denies each and every allegation of paragraph 147.
- 148. Thales admits that the quoted excerpts appear in 3GPP TS 36.201 § 4.2.2, 3GPP TS 36.211 §§ 6.8.1, 6.8.2, 6.8A.1, 6.8B.1, 3GPP TS 36.213 §§ 7.1, 9.1.5, 3GPP TS 36.212 § 5.3.3. Except as expressly admitted, Thales denies each and every allegation of paragraph 148.
- what is alleged to be "means for determining," where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "secondary station," "primary station," "control channels," and "allocated control channel" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits that the quoted excerpts appears in 3GPP TS 36.213 §§ 9.1.1, 9.1.4, 9.1.5. Except as expressly admitted, Thales denies each and every allegation of paragraph 149.
- 150. Thales incorporates by reference its responses to paragraphs 1-149 above as though fully repeated in response to paragraph 150.
  - 151. Thales denies each and every allegation of paragraph 151.

- 152. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to the doctrine of equivalents, contributory infringement, or inducement of infringement of any of the claims of the '711 patent. Thales is informed and believes that CalAmp, Xirgo, and Laird have purchased Thales cellular communication modules. Thales lacks knowledge or information sufficient to form a belief as to the truth of remaining allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales lacks knowledge of information sufficient to form a belief as to the truth of allegations of this paragraph relating to unidentified cellular communication modules or "the like." Except as expressly admitted, Thales denies each and every allegation of paragraph 152.
- the allegations in this paragraph relating to inducement of infringement of any of the claims of the '711 patent. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that it had actual knowledge of the '711 patent prior to the filing of the complaint. Thales lacks knowledge of

information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others," "end users," and "devices." Except as expressly admitted, Thales denies each and every allegation of paragraph 153.

- the factual basis for any of the allegations in this paragraph relating to contributory infringement of any of the claims of the '711 patent. Thales lacks knowledge or information to form a belief as to the truth of the allegations in this paragraph relating to CalAmp, Xirgo, and Laird. Thales lacks knowledge of information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others." Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that it had actual knowledge of the '943 patent prior to the filing of the complaint. Except as expressly admitted, Thales denies each and every allegation of paragraph 154.
  - 155. Thales denies each and every allegation of paragraph 155.
- 156. Thales admits that the Thales modules identified in paragraph 50 of the complaint is capable of being used in a radio communication system. Except as expressly admitted, Thales denies each and every allegation of paragraph 156.

- where in each Thales module identified in paragraph 50 of the complaint a "data channel" is alleged to be found, what part of each such Thales module is alleged to be "the primary station," and what part is alleged to be "the secondary station." Except as expressly admitted, Thales denies each and every allegation of paragraph 157.
- where in each Thales module identified in paragraph 50 of the complaint "a plurality of control channels" is alleged to be found, what part of each such Thales module is alleged to be "the primary station," and what part is alleged to be "the secondary station." Except as expressly admitted, Thales denies each and every allegation of paragraph 158.
- as to what is alleged to be the "means for determining ...," what part of each Thales module identified in paragraph 50 of the complaint is alleged to be "the primary station," what part is alleged to be "the secondary station," and where in each Thales module the "allocated control channel" is alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 159.

- which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Thales lacks knowledge or information sufficient to form a belief as to where in each Thales module identified in paragraph 50 of the complaint "data channel" and "plurality of control channels" are alleged to be found, what part of each such Thales module is alleged to be "the primary station," and what part is alleged to be "the secondary station." Except as expressly admitted, Thales denies each and every allegation of paragraph 160.
- what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the primary station," "the secondary station," "control channels," and "allocated control channel" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 161.

- what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the secondary station" and "currently allocated control channel" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 162.
- 163. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product" or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "the primary station," "control channels," and "plurality of secondary stations" are alleged to be found. Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 163.
- 164. Thales admits that its cellular communication modules comply with LTE standards set forth in 3GPP TS 36.306, 3GPP TS 36.201, 3GPP TS 36.211,

3GPP TS 36.212, and 3GPP TS 36.213. Except as expressly admitted, Thales denies each and every allegation of paragraph 164.

- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "secondary station," "primary station," "data channel," and "control channels" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits that ELS6-US is LTE (FDD) 3GPP Rel.9 compliant, that PLS62-W is 3GPP Rel.9 compliant, and ELS31-V is LTE (FDD) 3GPP Rel.9+. Thales admits that data sheets for ELS61, PLS62, and ELS31 are available at the cited links. Thales admits that the quoted excerpt appears in 3GPP TS 36.306 § 4.1A and that 3GPP Technical Specifications are published by 3GPP. Except as expressly admitted, Thales denies each and every allegation of paragraph 165.
- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "secondary station," "primary station," "data channel," "control channels," and "allocated control channel" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits

that the quoted language appears in 3GPP TS 36.201 § 4.2.2. Except as expressly admitted, Thales denies each and every allegation of paragraph 166.

- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "secondary station," "primary station," "control channels," and "allocated control channel" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits that the quoted excerpts appear in 3GPP TS 36.211 §§ 6.8.1, 6.8.2, 6.8A.1, 6.8B.1, 3GPP TS 36.212 § 5.3.3, and 3GPP TS 36.213 §§ 7.1, 9.1.1, 9.1.5. Except as expressly admitted, Thales denies each and every allegation of paragraph 167.
- as to what is alleged to be the "means for determining ...," what part of each Thales module identified in paragraph 50 of the complaint is alleged to be "the primary station," what parts are alleged to be "a plurality of secondary stations," "the secondary station monitoring the currently allocated control channel," and where in each Thales module "control channels" and "allocated control channel" are alleged to be found. Thales admits that the quoted excerpts appear in 3GPP TS 36.213 §§ 9.1.1, 9.1.4, 9.1.5. Except as expressly admitted, Thales denies each and every allegation of paragraph 168.

- 169. Thales incorporates by reference its responses to paragraphs 1-168 above as though fully repeated in response to paragraph 169.
  - 170. Thales denies each and every allegation of paragraph 170.
- the allegations in this paragraph relating to the doctrine of equivalents, contributory infringement, or inducement of infringement of any of the claims of the '711 patent. Thales is informed and believes that CalAmp, Xirgo, and Laird have purchased Thales cellular communication modules. Thales lacks knowledge or information sufficient to form a belief as to the truth of remaining allegations in this paragraph relating to CalAmp, Laird, or Xirgo. Thales lacks knowledge of information sufficient to form a belief as to the truth of allegations of this paragraph relating to unidentified cellular communication modules or "the like." Except as expressly admitted, Thales denies each and every allegation of paragraph 171.
- the factual basis of the allegations of inducement in this paragraph. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that this letter was sufficient to provide notice and denies

that Thales had actual knowledge of the '271 patent prior to the filing of the complaint. Thales lacks knowledge or information sufficient to form a belief as to the truth of allegations in this paragraph relating to CalAmp, Xirgo, or Laird. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to unidentified "others," "end users," and "devices." Except as expressly admitted, Thales denies each and every allegation of paragraph 172.

- 173. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to contributory infringement of any of the claims of the '271 patent. Thales lacks knowledge or information sufficient to form a belief as to the truth of allegations in this paragraph relating to CalAmp, Xirgo, or Laird. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales denies that this letter was sufficient to provide notice and denies that Thales had actual knowledge of the '271 patent prior to the filing of the complaint. Except as expressly admitted, Thales denies each and every allegation of paragraph 173.
  - 174. Thales denies each and every allegation of paragraph 174.

- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "communication station (MS)" is alleged to be found, or which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringe claim 1 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 175.
- 176. Each Accused Product includes a power control means for adjusting the power of the uplink control and data channels in response to the downlink power control commands. Except as expressly admitted, Thales denies each and every allegation of paragraph 176.
- 177. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 177.

- 178. Thales lacks knowledge or information sufficient to form a belief as to what is alleged as "the method of each Accused Product." Thales lacks knowledge or information sufficient to form a belief as to which entity used any of the Thales cellular communication modules identified in paragraph 50 of the complaint to perform the alleged method. Except as expressly admitted, Thales denies each and every allegation of paragraph 178.
- 179. Thales lacks knowledge or information sufficient to form a belief as to what part of each Thales module identified in paragraph 50 of the complaint is alleged to be "a communication station (MS)." Thales denies that any of the Thales modules identified in paragraph 50 of the complaint infringes claim 5 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 179.
- as to what is alleged to be the "transceiver means for transmitting." Except as expressly admitted, Thales denies each and every allegation of paragraph 180.
- 181. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "control means." Except as expressly admitted, Thales denies each and every allegation of paragraph 181.

- 182. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "control means." Except as expressly admitted, Thales denies each and every allegation of paragraph 182.
- 183. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals," "second signal," and "the third signal" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 183.
- 184. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "control means" or where in each of the Thales modules identified in paragraph 50 of the complaint "first signals," "first frames," additional signals," and "second frames" are alleged to be found. Thales denies that any of the Thales modules identified in paragraph 50 of the complaint infringes claim 6 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 184.
- 185. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "boundaries," "first frames," and "second frames" are alleged to

be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 185.

- 186. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "boundary" and "first frame" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 186.
- 187. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint the alleged "second signal ... is a positive acknowledgement" and the alleged "third signal ... is a negative acknowledgement." Thales denies that any of the Thales modules identified in paragraph 50 of the complaint infringes claim 7 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 187.
- which signals in each of the Thales cellular communication modules identified in paragraph 50 of the complaint are alleged to be spread spectrum signals. Thales denies that any of the Thales modules identified in paragraph 50 of the complaint infringes claim 8 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 188.

- 189. Thales admits that its cellular communication modules comply with 3G UMTS standards set forth in 3GPP TS 25.101, 3GPP TS 25.211, 3GPP TS 25.212, 3GPP TS 25.213, and 3GPP TS 25.214. Except as expressly admitted, Thales denies each and every allegation of paragraph 189.
- what part of each of the Thales cellular communication modules identified in paragraph 50 of the complaint is alleged to be a "communication station (MS)," where the "plurality of signals" are alleged to be found, or which entity is alleged to have performed the methods alleged in this paragraph. Thales admits that ELS6-US is LTE (FDD) 3GPP Rel.9 compliant, that PLS62-W is 3GPP Rel.9 compliant, and ELS31-V is LTE (FDD) 3GPP Rel.9+. Thales admits that data sheets for ELS61, PLS62, and ELS31 are available at the cited links. Except as expressly admitted, Thales denies each and every allegation of paragraph 190.
- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint the transceiver for transmitting and receiving data, higher layers, "Dedicated Physical Control Channel," and "Dedicated Physical Data Channel" are alleged to be found. Thales admits that the quote language appears in 3GPP TS 25.211 §§ 5.2.1, 5.2.1.1, 5.2.1.1, 3GPP TS 25.214 §§ 5.1.2.1, 5.1.2.5, 5.1.2.5A.

Except as expressly admitted, Thales denies each and every allegation of paragraph 191.

- what part of each of the Thales cellular communication modules identified in paragraph 50 of the complaint is alleged to be a "communication station," where the transceiver, High-Speed Downlink Share Channel, "plurality of signals," and "first signals" are alleged to be found, or which entity is alleged to have performed the method alleged in this paragraph. Thales admits that the quote language appears in 3GPP TS 25.201 § 6.2.1, 3GPP TS 25.211 §§ 5.3.3.13, 4.1.2.7, 3GPP TS 25.214 §§ 5.1.2.6, 6A.1.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 192.
- which entity is alleged to have performed the method alleged in this paragraph. Thales admits that the quote language appears in 3GPP TS 25.214 § 5.1.2.6. Except as expressly admitted, Thales denies each and every allegation of paragraph 193.
- 194. Thales lacks knowledge or information sufficient to form a belief as to which entity is alleged to have performed the method alleged in this paragraph.

  Thales admits that the quote language appears in 3GPP TS 25.211 § 5.2.1, 3GPP TS

25.212 § 4.7.1.1, 3GPP TS 25.214 §§ 5.1.2.5A, 5.1.2.6, 6A.1.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 194.

- which entity is alleged to have performed the method alleged in this paragraph. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringes claim 2 or claim 6 of the '271 patent. Thales admits that the quote excerpts appear in 3GPP TS 25.211 § 7.7. Except as expressly admitted, Thales denies each and every allegation of paragraph 195.
- where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "boundaries," "first frames," and "second frames" are alleged to be found, or which entity is alleged to have performed the method alleged in this paragraph. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringes claim 1 of the '271 patent. Except as expressly admitted, Thales denies each and every allegation of paragraph 196.
- 197. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals" and "first frame" are alleged to be found. Thales

admits that the quote language appears in 3GPP TS 25.214 § 5.1.2.6. Except as expressly admitted, Thales denies each and every allegation of paragraph 197.

where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "communication station (MS)," "second signal," and "third signal" are alleged to be found, or which entity is alleged to have performed the method alleged in this paragraph. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringes claim 3 or claim 7 of the '271 patent. Thales admits that the quote language appears in 3GPP TS 25.214 § 3.2. Except as expressly admitted, Thales denies each and every allegation of paragraph 198.

199. Thales lacks knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "communication station (MS)" and "spread spectrum signals" are alleged to be found, or which entity is alleged to have performed the method alleged in this paragraph. Thales denies that any of the Thales cellular communication modules identified in paragraph 50 of the complaint infringes claim 4 or claim 8 of the '271 patent. Thales admits that the quote language appears in

3GPP TS 25.213 § 4.1. Except as expressly admitted, Thales denies each and every allegation of paragraph 199.

- 200. Thales lacks knowledge or information sufficient to form a belief as to what parts of each of the Thales cellular communication modules identified in paragraph 50 of the complaint are alleged to be "communication stations (MS)." Except as expressly admitted, Thales denies each and every allegation of paragraph 200.
- 201. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "transceiver means for transmitting," or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals," "received signal," "second signals," and "third signal" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 201.
- 202. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "control means for controlling," or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals" and "additional signal" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 202.

- 203. Thales is without knowledge or information sufficient to form a belief as to what is alleged to be the "control means," or where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals" and "additional signal" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 203.
- 204. Thales is without knowledge or information sufficient to form a belief as to where in each of the Thales cellular communication modules identified in paragraph 50 of the complaint "first signals," "additional signal," "second signal," and "third signal" are alleged to be found. Except as expressly admitted, Thales denies each and every allegation of paragraph 204.
- 205. Thales incorporates by reference its responses to paragraph 1-204 above as though fully repeated in response to paragraph 205.
- 206. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to other defendants. Thales admits that it has declined to accept Philip's non-FRAND offers to license its worldwide patent portfolio. Except as expressly admitted, Thales denies each and every allegation of paragraph 206.
- 207. Thales admits that Plaintiff sent a letter dated December 11, 2015 to Gemalto N.V., introducing the Philips GSM-AMR/UMTS/LTD patent licensing

program and attaching a list of approximately 600 patents characterized as essential to GSM, UMTS, and LTE standards. Thales admits that it has declined to accept Philips' non-FRAND offers to license its worldwide patent portfolio. Except as expressly admitted, Thales denies each and every allegation of paragraph 207.

- 208. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph. Except as expressly admitted, Thales denies each and every allegation of paragraph 208.
- 209. Thales admits that it has declined to accept Philips' non-FRAND offers to license its worldwide patent portfolio. Thales denies that it has not committed to license Philips' worldwide patent portfolio under FRAND terms determined by this Court. Thales admits that it is submitting a declaration, submitted herewith, attesting that it will enter a license to Philips' worldwide cellular communication patents under FRAND and ETSI terms determined by this Court. *See* Ex. 1, First Declaration of Robert Antonitsch ¶¶ 5-6. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to other defendants. Except as expressly admitted, Thales denies each and every allegation of paragraph 209.
- 210. Thales admits that an actual controversy has arisen between Philips and Thales regarding whether the license offered by Philips complies with FRAND and

ETSI terms and that there is an immediate case or controversy for declaratory judgment of the appropriate FRAND and ETSI terms for a license to Philips' worldwide patent portfolio. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to other defendants. Except as expressly admitted, Thales denies each and every allegation of paragraph 210.

- Thales admits that an actual controversy has arisen between Philips and Thales regarding whether the license offered by Philips complies with FRAND and ETSI terms and that there is an immediate case or controversy for declaratory judgment of the appropriate FRAND and ETSI terms for a license to Philips' worldwide patent portfolio. Thales lacks knowledge or information sufficient to form a belief as to the truth of the allegations in this paragraph relating to other defendants. Except as expressly admitted, Thales denies each and every allegation of paragraph 211.
- 212. Thales incorporates by reference its responses to paragraphs 95-204 above as though fully repeated in response to paragraph 212. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to the willful infringement of any of the claims of the asserted

patents. Except as expressly admitted, Thales denies each and every allegation of paragraph 212.

above as though fully repeated in response to paragraph 213. Thales lacks knowledge or information as to the factual basis for any of the allegations in this paragraph relating to the exceptional infringement of any of the claims of the asserted patents entitling Philips to an award of attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285. Except as expressly admitted, Thales denies each and every allegation of paragraph 213.

#### **AFFIRMATIVE DEFENSES**

# FIRST AFFIRMATIVE DEFENSE (FAILURE TO STATE A CLAIM)

Plaintiff has failed to state any viable claim on which relief may be granted because, among other things, Plaintiff is not entitled to injunctive relief in addition to FRAND royalties for SEPs, and Plaintiff has not stated a plausible allegation that any of the Thales cellular communication modules identified as accused products meets each claimed element of any asserted claim of the asserted patents.

## SECOND AFFIRMATIVE DEFENSE (EQUITABLE ESTOPPEL/WAIVER)

By making FRAND commitments, patent holders waive injunctive remedies with respect to willing licensees. Plaintiff has violated its obligations as an SEP-holder and breached its FRAND commitments to ETSI by pursuing injunctive relief against Thales and purchasers of Thales cellular communication modules, for the purpose of coercing Thales and/or its customers to acquiesce to a license on non-FRAND terms. Due to this conduct, Plaintiff is equitably estopped from asserting SEPs to obtain injunctive relief and waived its right to seek injunctive relief or non-FRAND license terms.

# THIRD AFFIRMATIVE DEFENSE (EXPRESS OR IMPLIED LICENSE)

Thales is expressly or impliedly licensed to practice the asserted patents as a result of: (1) Philips' commitment and obligation under the ETSI IPR Policy to license the asserted patents to all willing licensees on FRAND terms and conditions; (2) Plaintiff's request for declaratory judgment setting the FRAND terms and conditions for its worldwide portfolio of alleged SEPs, which includes the asserted patents; and (3) Thales' written affirmation that it will take a FRAND license to Philips' worldwide SEP portfolio on the FRAND terms and conditions adjudicated by the Delaware District Court.

## FOURTH AFFIRMATIVE DEFENSE (NON-INFRINGEMENT)

Thales has not infringed and does not infringe under any theory of infringement (literally or under the doctrine of equivalents, directly or indirectly) any valid and enforceable claim of the asserted patents. Plaintiff has not shown and will be unable to prove infringement of the asserted patents with respect to any of the Thales cellular communication modules identified as accused products. Plaintiff has further failed to provide any factual basis to state a claim of infringement under the doctrine or equivalents or contributory infringement or inducement of infringement of any valid and enforceable claim of the asserted patents. The asserted claims of the asserted patents are not entitled to a scope sufficient to encompass any of the Thales cellular communication modules identified as accused products.

## FIFTH AFFIRMATIVE DEFENSE (PATENT-INELIGIBLE SUBJECT MATTER)

The asserted claims of the asserted patents are invalid for failing to claim patent-eligible subject matter under 35 U.S.C. § 101. The focus of the asserted claims of each asserted patent is directed toward a patent-ineligible abstract idea, and the claim elements recite only generic or well-known technological components and fail to provide any inventive concept.

## SIXTH AFFIRMATIVE DEFENSE (INVALIDITY)

The asserted claims of the asserted patents are each invalid for failure to comply with one or more of the conditions and requirements of the patent laws, including but not limited to 35 U.S.C. §§ 101, 102, 103, 112, 115, 116, and/or 256.

## SEVENTH AFFIRMATIVE DEFENSE (PROSECUTION HISTORY ESTOPPEL)

On information and belief, due to admissions and statements made to the United States Patent and Trademark Office during the prosecution of the applications that resulted in the asserted patents or related patent applications, Plaintiff is estopped from construing a valid and enforceable claim, if any, of the asserted patents as infringed literally or under the doctrine of equivalents by the accused products.

# EIGHTH AFFIRMATIVE DEFENSE (PATENT EXHAUSTION)

On information and belief, Plaintiff's patent infringement claims against Thales are barred as a result of patent exhaustion based on licenses to Thales' chip suppliers.

#### NINTH AFFIRMATIVE DEFENSE (NO KNOWLEDGE/NO WILLFUL INFRINGEMENT)

Plaintiff has failed to provide pre-filing notice as required under 35 U.S.C. § 287. As such, Plaintiff has no basis to claim willful infringement, and Thales did not have knowledge of the asserted patents for any claim of contributory infringement or knowledge of any infringing act for any claim of inducement.

## TENTH AFFIRMATIVE DEFENSE (LIMITATION OF DAMAGES)

Plaintiff's claims for relief are barred, in whole or in part, by operation of the applicable statutes which limit damages and other relief, including 35 U.S.C. §§ 286, 287, 288.

# COUNTERCLAIM OF THALES DIS AIS USA, LLC AND THALES DIS AIS DEUTSCHLAND GMBH

Defendant-Counterplaintiffs Thales DIS AIS Deutschland GmbH and Thales DIS AIS USA, LLC (collectively "Thales") state the following as their Counterclaims against Plaintiff-Counterdefendant Koninklijke Philips N.V. and Counterdefendant Philips RS North America LLC (collectively "Philips").

#### **NATURE OF THE CASE**

1. The dispute between Philips and Thales centers on Philips' obligation to license its worldwide portfolio of standard essential patents ("SEPs") to Thales

on terms and conditions that are Fair, Reasonable, and Non-Discriminatory ("FRAND").

- 2. Thales has always been willing to take a license to Philips' SEPs on FRAND terms, but Philips has both failed to accept Thales' FRAND offer and to itself provide a FRAND offer to Thales.
- 3. As set forth herein, Philips has only paid lip service to its obligation to negotiate in good faith and to license its SEPs to Thales on FRAND terms, and has engaged in a series of actions designed to force Thales to acquiesce to a supra-FRAND license.
- 4. Due to Philips' unwillingness to offer Thales a FRAND license, Thales asks this Court to issue a Declaratory Judgment setting forth the FRAND terms for Philips' worldwide portfolio of SEPs, and to require and enjoin Philips to enter into a license on such terms, as Philips is obligated under the rules and policies of the European Telecommunications Standards Institute ("ETSI").
- 5. Philips has also demanded a Declaratory Judgment as to the FRAND rate and terms for a license to be adjudicated by this Court for Philips' worldwide portfolio of SEPs.

#### **PARTIES**

#### A. Thales

- 6. Thales DIS AIS Deutschland GmbH, formerly known as Gemalto M2M GmbH, is an entity organized under the laws of Germany with its headquarters at Werinherstraße. 81, München, Bayern, 81541, Germany.
- 7. Thales DIS AIS USA, LLC is a Delaware limited liability company, and its address is 310 120th Avenue NE, Unit A/100, Bellevue, Washington 98005.
- 8. Thales is an industry pioneer and world leader in the field of machine-to-machine ("M2M") communications. M2M communication enables innovative technology advances in a range of industries including healthcare, retail services, smart energy, transportation, logistics and automotive.
- 9. Thales develops and makes wireless network access modules ("NADs," "wireless modules" or "modules") that enable devices and machines to communicate and exchange data with other devices and machines. Thales' modules thus sit at the heart of the Internet-of-Things ("IoT"), which is commonly identified as crucial driver of future economic growth.
- 10. Thales' wireless modules utilize wireless radio communications standard technologies that provide global geographic coverage and include the third

generation ("3G"), and/or fourth generation/Long Term Evolution ("4G/LTE") cellular communications standards.

#### B. Philips

- 11. Koninklijke Philips N.V. is a public limited company established under the laws of The Netherlands, having its registered office at High Tech Campus 52, 5656 AG Eindhoven, The Netherlands.
- 12. Philips RS North America LLC, a Delaware corporation, is a wholly owned subsidiary of Koninklijke Philips N.V., and one of the Complainants in the investigation pending before the United States International Trade Commission ("ITC") involving the same asserted patents from Philips' SEP portfolio.
- 13. Philips is a member of ETSI, a Standards Setting Organization ("SSO") that develops industry standards for information and communications technologies. ETSI permits its members to include patented technology in a standard if, and only if, they irrevocably promise to license their SEPs on FRAND terms and conditions to any company that makes, uses, and/or sells products implementing the 3G and/or 4G/LTE standards.
- 14. As set forth in Philips' Complaint in this case, and in Case No. 1:20-cv-1709-CFC, Philips owns a portfolio of patents that Philips have declared essential or potentially essential to the 3G and/or 4G/LTE standards developed by ETSI.

- 15. Philips' worldwide portfolio of SEPs is not limited to the ten patents asserted here and in Case No. 1:20-cv-1709-CFC. Philips contends that its portfolio of SEPs relevant to the 3G and/or 4G/LTE standards includes about 600 patents.
- 16. Under the ETSI rules and policies, Philips is required to grant Thales a license on FRAND terms and conditions to the entirety of this SEP portfolio, including but not limited to the four patents asserted here and in the ITC, *Certain UMTS and LTE Cellular Communication Modules and Products Containing the Same*, Inv. No. 337-TA-1240, and the six patents asserted in Case No. 1:20-cv-1709-CFC. Philips' self-identification of the patents as essential does not imply that the patents are valid or infringed by Thales' modules.

#### **JURISDICTION AND VENUE**

- 17. The Court has subject matter jurisdiction over these Counterclaims pursuant to 28 U.S.C. §§ 1331, 1338(a), 1367, 2201, and 2202.
- 18. Having filed at least six actions in this Court asserting the same sets of four and six patents from its SEP portfolio, Case Nos. 1:20-cv-1707-CFC, 1:20-cv-1708-CFC, 1:20-cv-1709-CFC, 1:20-cv-1710-CFC, 1:20-cv-1711-CFC, 1:20-cv-1713-CFC, Plaintiff-Counterdefendant Koninklijke Philips N.V. has consented to personal jurisdiction in this Court and availed itself of the privileges and benefits of this Court.

- 19. As an entity formed under the laws of Delaware, Counterdefendant Philips RS North America LLC is subject to personal jurisdiction in this Court.
- 20. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), (c) as a substantial part of the events or omissions giving rise to Thales' Counterclaim occurred in this District, and Counterdefendants are subject to personal jurisdiction in this District, based, among other things, on their actions in affirmatively seeking the benefit of this Court in filing numerous civil actions involving the patents asserted in those actions and/or Philips' SEP portfolio, as well as the license obligations associated with those patents, which are at issue here.
- 21. As Philips has alleged in its Complaint, and on which Thales agrees, there is an actual and justiciable case or controversy before this Court as to the FRAND rate and terms on which a required license must be granted.

#### **FACTUAL ALLEGATIONS**

#### A. Overview of Cellular Standards

22. Cellular communications depend on widely distributed networks that implement cellular communications standards. These standards promote availability and interoperability of standardized products regardless of geographic boundary. The first generation – or "1G" – standards were developed in the 1980s and offered relatively basic functionality, supporting just a few analog signals (as opposed to the

digital signals used today). The move to 2G began in the late 1980s and the primary 2G standards became the Global System for Mobile communications and Code Division Multiple Access.

- 23. In the late 1990s, the cellular industry began to develop 3G, which offered higher transmission speeds, ability to support more users, and improved reliability. The leading 3G standards families are CDMA2000 and the Universal Terrestrial Radio Access.
- 24. In the late 2000s, the faster 4G/LTE standard was developed and has been adopted almost universally as the 4G/LTE cellular communication standard. A number of technical specifications for 4G/LTE have been developed and released over the years, each providing technical enhancements and improvements. Cellular products and components implementing 4G/LTE are not required to practice every release of the 4G/LTE standard, and every Thales module therefore does not need a license to all the same 4G/LTE patents.

## **B.** Standard Setting Organizations and Intellectual Property Rules

25. Participants of SSOs such as ETSI engage in the development of industry standards for the benefit of their members and affiliates, third parties implementing the standards, and consumers.

- 26. SSOs such as ETSI play a crucial role in the technology market because they permit companies to agree on common technology standards so that compliant products implementing the standards will work together. When many companies produce components that must interoperate in a complex system, the collaboration of industry participants is the most efficient way to establish the requisite standards. Compatibility standards, such as the 3G and 4G/LTE cellular communications standards at issue here, are adopted in industries in which complementary products or components, manufactured by different suppliers, must interoperate, interface, or communicate with each other.
- 27. ETSI is one of several SSOs that belong to the Third Generation Partnership Project ("3GPP"). 3GPP unites various recognized SSOs and provides them with an environment in which to produce technical standards in the information and communication industry, including for cellular technologies.
- 28. ETSI, in conjunction with 3GPP, has developed standards and/or technical specifications for the 3G and 4G/LTE cellular technologies.
- 29. Once a standard is set and companies have invested in the development and manufacture of products that implement the standard, it becomes practically and commercially infeasible to either revise the standard or switch to a new standard, and the industry therefore becomes "locked-in." This imparts enormous market

power on owners of patents that cover the standard. Many SSOs, including ETSI, accordingly refuse to standardize patented technologies without a FRAND commitment by such patent owners.

### C. ETSI's IPR Policy

- 30. ETSI is an independent, non-profit SSO that is responsible for the standardization of information and communication technologies, including mobile cellular technologies, for the benefit of its members and affiliates.
- 31. In order to prevent industry participants from unduly leveraging patents or technology incorporated into standards, a phenomenon known as "hold-up," SSOs adopt policies regarding intellectual property rights ("IPRs").
- 32. ETSI's IPR Policy<sup>2</sup> requires that members disclose all intellectual property rights that they believe may be or become essential during the development of an ETSI standard:

[E]ach MEMBER shall use its reasonable endeavours [sic], in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

<sup>&</sup>lt;sup>2</sup> See ETSI, Rules of Procedure: Annex 6: ETSI Intellectual Property Rights Policy, <a href="https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf">https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf</a> (last visited Feb. 5, 2021).

ETSI IPR Policy, § 4.1.

33. Additionally, ETSI's IPR Policy requires that members owning patents potentially essential for the practice of a standard to irrevocably commit to license those patents on FRAND terms and conditions to anyone practicing the standard:

When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR ... The above undertaking may be made subject to the condition that those who seek licenses agree to reciprocate.

ETSI IPR Policy, § 6.1.

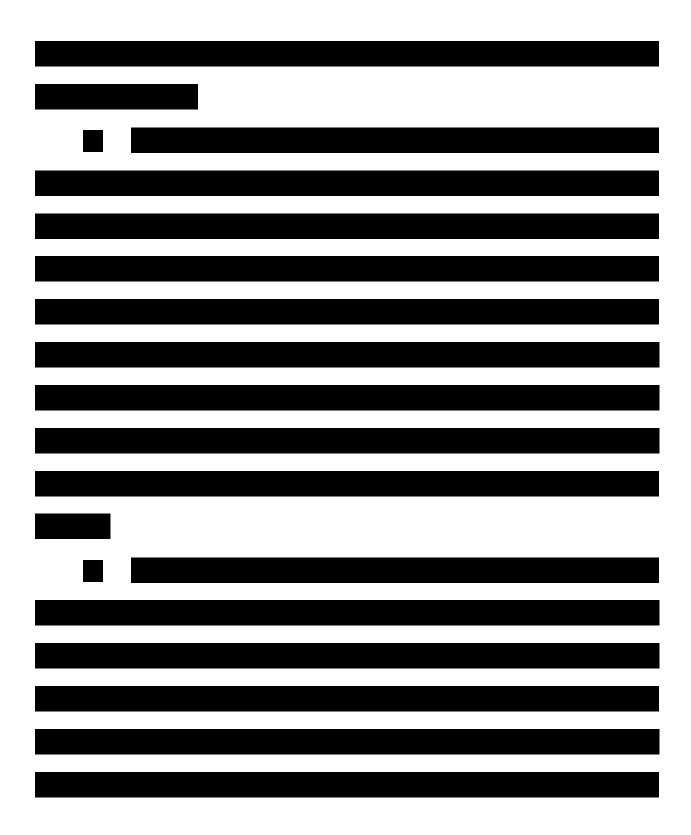
- 34. Clause 6.1bis of the ETSI IPR Policy further specifies that the FRAND commitments "shall be interpreted as encumbrances that bind all successors-in-interest."
- 35. ETSI does not attempt to ascertain whether the patents declared as potentially "essential" to a standard are valid and enforceable, or whether they are, in fact, technically essential. Thus, which patents are deemed potentially "essential" to a particular standard is self-proclaimed by the declaring SSO member.
- 36. If an owner of an essential patent informs ETSI that it refuses to undertake the FRAND commitments, the ETSI IPR Policy requires ETSI to either

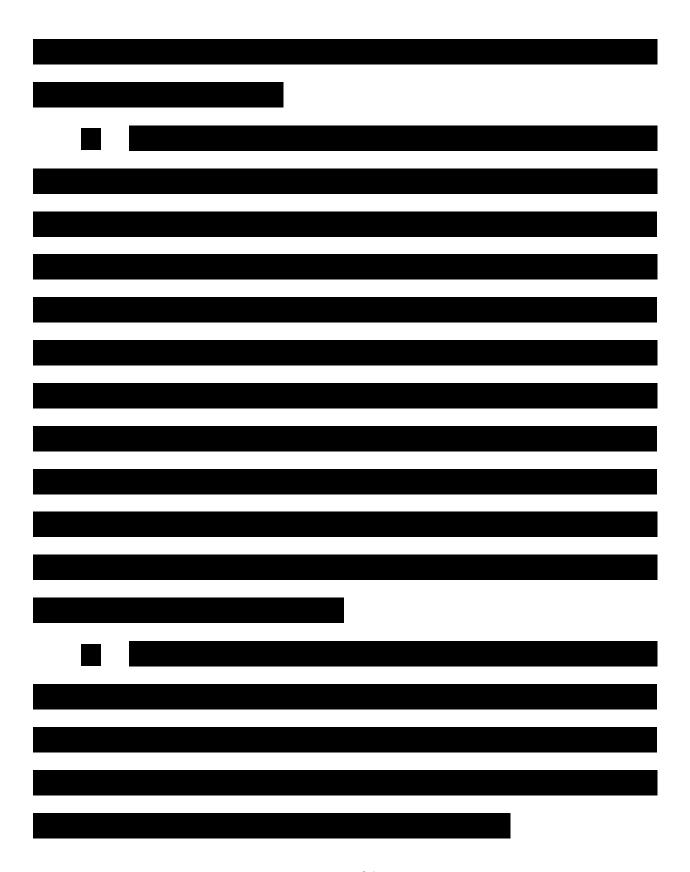
determine that there is a viable alternative technology for the relevant standard that is not blocked by the patent. ETSI IPR Policy, § 8.1.1. In the absence of such an alternative, ETSI must cease work on the standard. *Id.*, at § 8.1.2. In other words, ETSI will not agree to incorporate a member's technology into a standard under consideration unless the member irrevocably binds itself to granting licenses on FRAND terms.

- 37. The ETSI IPR Policy is governed by French law. *See* ETSI IPR Policy, § 12. Under French Law, the ETSI Policy is a binding contract that requires members and their successors and assigns to license their declared SEPs on FRAND terms and conditions to standards-implementers. Standards-implementers like Thales are third-party beneficiaries to this contract and may enforce its terms.
- 38. The ETSI IPR Policy attempts to guard against unfair holdup by patent holders that might otherwise seek to obtain unreasonable royalties because they hold patents that were incorporated into a standard or technical specification.
- 39. ETSI's IPR Policy attempts to prevent members' and others' abuse of SEPs.
- 40. Consistent with ETSI's IPR Policy and relying on the assurances of FRAND commitments binding SEP holders and their successors-in-interest, such as Philips, Thales has invested substantial resources in developing 3G and/or 4G/LTE

standard-compliant modules and marketing them worldwide, including in the United States. However, in disregard of its binding FRAND encumbrances, Philips has failed and refused to license its alleged SEPs to Thales on FRAND terms and conditions.

- D. Philips' Failure To Engage in Good-Faith Negotiations and Failure To Offer Thales a License on FRAND Terms
- 41. Philips has engaged in a series of actions to provide itself a cover for its failure to offer Thales a license on FRAND terms. These actions include offering to license its self-declared SEPs only at supra-FRAND rates; refusing to share crucial information regarding the basis for calculating the that Philips has unilaterally pronounced to be FRAND terms; refusing to disclose to Thales its other license agreements so that Thales could verify that any Philips offer is non-discriminatory; threatening Thales with infringement actions, injunctions, and exclusion orders unless it agreed to Philips' supra-FRAND demands; and indeed filing such actions to force acquiescence to these supra-FRAND rates through the imposition of enormous litigation costs and the risk of exclusion from the market.
- 42. On December 11, 2015, Philips first approached Thales regarding Philips' portfolio of alleged SEPs. Thales responded by agreeing to meet with Philips and exchange information relevant to licensing.







on December 17, 2020, Philips unilaterally, and unexpectedly, filed three separate legal proceedings in the United States with the goal of bringing Thales to its knees. On that day, Philips filed two separate, but undeniably related, cases in this Court (Case Nos. 1:20-cv-1709-CFC and 1:20-cv-1713-CFC) that both sought to have the Court determine the FRAND terms for a license between Thales and Philips. In addition, Philips also filed a complaint before the ITC claiming patent infringement for the very same patents that are at issue in this case (No. 1:20-cv-1713-CFC). Though part of the same portfolio

of SEPs, Philips did not include the patents at issue in Case No. 1:20-cv-1709-CFC in its ITC complaint ("ITC Complaint").

- 52. Unlike the two Complaints filed in this Court, which both sought a FRAND license determination, Philips' ITC Complaint seeks to exclude all Thales products that use the technology of the alleged SEPs from trade in the United States.
- 53. Even after Thales agreed to provide Philips with a declaration or an affidavit agreeing to be bound by the FRAND license determination of this Court, Philips persisted in pursuing an exclusion order from the ITC. The purpose of that tactic was to increase the pressure on Thales to capitulate to exorbitant rates, rather than proceeding in good faith before this Court to obtain a FRAND rate adjudicated by the Court.
- 54. In its communications with Philips, Thales made it clear that in committing to abide by the decision of this Court on the FRAND license, it expected Philips would discontinue its ITC action. But Philips, notwithstanding having received Thales' good faith agreement to be bound by the FRAND decision of this Court, continued to put pressure on Thales and its customers by continuing the ITC action.
- 55. Philips did not want a FRAND rate; it wanted a supra-FRAND rate. Pressure was Philips' tool of choice.

56. ITC actions are widely known to be extraordinarily expensive undertakings. One year before the ITC can easily cost over \$5 million dollars. *See*, *e.g.*, American Intellectual Property Law Association, 2019 Rep't of the Economic Survey 52. From initial case management to any applicable appeals, and depending on the value of goods at issue, ITC actions can have cost an average of almost \$8 million for litigants. *Id.* Moreover, the very threat of an exclusion order is causing irreparable harm to Thales.

# FIRST CAUSE OF ACTION (DECLARATORY JUDGMENT)

- 57. Thales repeats and realleges the preceding paragraphs as if fully set forth herein.
- 58. Philips is contractually obligated to license its 3G and 4G/LTE SEPs on FRAND terms and conditions. There is a dispute between the parties because Philips has failed to offer Thales a license to Philips' SEPs on FRAND terms.
- 59. Philips has sued Thales for infringement of its alleged SEPs, some or all of which are to be included in the FRAND license to which Thales is entitled.
- 60. Philips has also sued Thales for a declaratory judgment to obtain a FRAND license under ETSI's terms. As part of its suit, Philips has required that Thales provide a sworn affidavit that it will sign a license to Philips' allegedly SEP portfolio pursuant to a FRAND rate determined by this Court. Thales is submitting

herewith a declaration to same effect as the requested affidavit. Ex. 1, First Declaration of Robert Antonitsch ¶¶ 5-6.

- 61. As a result of the acts described herein, there exists a definite and concrete, real and substantial, justiciable controversy between Thales and Philips regarding what constitutes FRAND terms and conditions for a worldwide license to Philips' 3G and 4G/LTE SEPs with respect to the Thales modules. This dispute is of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.
- 62. Thales is entitled to a declaratory judgment that sets the FRAND terms and conditions, including but not limited to the FRAND royalty rate, for a worldwide license to Philips' 3G, and 4G/LTE SEPs.

# SECOND CAUSE OF ACTION (BREACH OF CONTRACT)

- 63. Thales repeats and realleges the preceding paragraphs as if fully set forth herein.
- 64. Philips entered into contractual commitments with ETSI and their respective members, participants, and implementers relating to the 3G and 4G/LTE cellular standards. As such, Philips made binding commitments to ETSI, ETSI members, and third-party implementers to grant irrevocable licenses to IPRs

covering the 3G and 4G/LTE cellular standards. The ETSI IPR policy is governed by French law.

- 65. ETSI's IPR Policy constitutes an enforceable agreement, supported by consideration, between Philips and ETSI's members, or alternatively between Philips and ETSI, to which ETSI members and others, including but not limited to Thales and its customers, are third-party beneficiaries.
- 66. Each and every entity with products that implement the 3G and/or 4G/LTE cellular standards promulgated by ETSI is an intended third-party beneficiary of these FRAND contractual commitments, including Thales.
- 67. ETSI members and third parties including Thales have developed, marketed, and/or used products that practice the 3G and 4G/LTE standards with the understanding that any patents declared essential to those standards by Philips would be subject to an obligation to license on FRAND terms.
- 68. Philips now contends that the Asserted Patents are essential to the 3G and 4G/LTE cellular standards. To the extent the Asserted Patents are essential to the 3G, and/or 4G/LTE cellular standards, Philips has breached its FRAND obligations under the ETSI IPR Policy separately and individually by: (1) refusing to provide Thales a license on FRAND terms and conditions; (2) refusing to negotiate in good faith; (3) filing the ITC Complaint seeking an exclusion order

against Thales; and (4) continuing to pursue the ITC Complaint against Thales and Thales' products, even after Thales pledged in writing to take a license on the FRAND terms determined by this Court.

- 69. Philips has further breached its contract, and the covenant of good faith and fair dealing that is contained in this contract under French law, as well as under the law of Delaware, by failing to negotiate in good faith a license to Thales under FRAND terms; by unilaterally terminating negotiations and commencing three separate actions; by seeking an Exclusion Order before the ITC while simultaneously asking this Court to set FRAND terms and rates for a license to Thales for the SEPs at issue; and by demanding that Thales provide an affidavit or declaration agreeing to be bound by the FRAND determination of this Court, and then pursuing an Exclusion Order before the ITC even after Thales provided the very assurance that Philips had demanded. *See* Ex. 1, First Declaration of Robert Antonitsch ¶ 5-6.
- 70. As a result of Philips' contractual breach, Thales has been damaged in an amount to be proved at trial, and continues to be harmed by Philips' continued breach resulting in irreparable damage to Thales' business relationships.
- 71. Thales has suffered and will continue to suffer injury by reason of the acts, practices, and conduct alleged herein until and unless the Court enjoins such

acts, practices, and conduct, dismisses this Complaint, and orders Philips to offer a FRAND license to Thales.

#### **PRAYER FOR RELIEF**

WHEREFORE, Thales denies that Philips is entitled to any relief whatsoever on its Complaint and respectfully requests that this Court enter judgment as follows:

- (a) Declaring the FRAND rate (or lump sum amount) for a license to the Philips worldwide patent portfolio, which includes the four patents asserted here and in the ITC and the six patents asserted in Case No. 1:20-cv-1709-CFC;
- (b) Declaring that Thales is a willing licensee and that Philips has breached its ETSI obligations to offer FRAND terms and conditions for a license to its declared essential worldwide cellular communications patent portfolio;
- (c) Ordering Philips to offer to Thales a license under FRAND terms and conditions determined by this Court;
- (d) Finding that Thales does not infringe any of the patents asserted in this action and in the ITC either directly or indirectly, literally or under the doctrine of equivalents;
- (e) Finding that Philips has failed to provide pre-filing notice of the asserted patents to Thales;

- (f) Finding that the asserted patents are invalid under at least 35 U.S.C. §§ 101, 102, 103, and 112;
- (g) Enjoining Philips and its affiliates, subsidiaries, officers, directors, employees, agents, representatives, licensees, successors, assigns, and all those acting for any of them or on their behalf, or acting in concert with them, from pursuing an Exclusion Order before the ITC during the pendency of the cases Philips has filed against Thales in this District, and from making threats or pursuing unjustified claims of injunctive relief against Thales or any purchasers of Thales cellular communications modules in any domestic or foreign court or administrative agency;
- (h) Awarding Thales compensatory damages in an amount to be proved at trial, with costs and prejudgment interest;
- (i) Declaring this case to be exceptional in favor of Thales under 35 U.S.C. § 285, and that Thales be awarded their costs, attorneys' fees, and other expenses incurred in connection with this action and Inv. No. 337-TA-1240 in the United States International Trade Commission;
- (j) Granting Thales such other and further relief that the Court deems just and proper.

### **JURY DEMAND**

Thales demands a trial by jury on all issues so triable.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

## /s/ Andrew M. Moshos

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March 5, 2021

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#### **CERTIFICATE OF SERVICE**

I hereby certify that on March 5, 2021, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to all registered participants.

I further certify that I caused copies of the foregoing document to be served on March 5, 2021, upon the following in the manner indicated:

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